Session A-4: Demonstrating the Need for Health Promotion in Construction: Data and Selected Success Stories. Session Organizers: Janie Gittleman, Center to Protect Workers Rights, and Jeff Kohler, National Institute for Occupational Safety and Health

• Key items from the presentations

Norman Anderson, Administrator, Carpenters Trusts of Western Seattle, described how joint labor-management trust funds operate to provide health insurance to unionized construction carpenters in Washington State. Use of commercially available software has provided fund managers with a tool to profile and track health conditions and costs. Approximately three quarters of the costs are for chronic care, with the other quarter associated with acute care. The tool allows for a break out of different acute and chronic conditions by type, and provides the number and percentage of plan participants affected, along with fund expenditures. It can help identify health conditions (e.g. high cholesterol, depression, back injuries) where preventive interventions might be helpful and helps show the business case for such interventions. The trust has plans to add internet-based health information, a nurse care coordinator and similar features to improve services and minimize patterns of sub-optimal use of funds.

Hester Lipscomb, Ph.D., Associate Professor, Division of Occupational and Environmental Medicine at Duke University, provided examples to demonstrate how data sources (health care claims, work records, workers compensation claims, mortality records, active injury surveillance, and focus groups) can be used to identify targets for health and safety promotion and prevention. For example, carpenters with substance abuse diagnoses were higher utilizers of health care through their union provided insurance but not through the workers' compensation system. Also, state data on construction worker fatal injuries show a high percentage of non-workplace related motor vehicle fatalities, electrocutions, and fatal fall injuries are associated with alcohol, in contrast to only a small percentage of work related fatal injuries. These findings suggest that substance abuse efforts should shift away from a workplace focus to a workforce focus. The current focus of most workplace drug testing efforts is the workplace; these programs often fail to address alcohol abuse which was more common among union carpenters. Musculoskeletal disorders are responsible for a significant burden in both the workers' compensation system and private insurance system for union carpenters; differences in risk by type of work provide support for occupational etiologys. A study of residential carpenter workers compensation claims found that two activities (setting steel beams and raising framed walls) were associated with 65% of direct costs associated with manual materials handling suggesting the need for task-specific occupational interventions. Focus groups with residential apprentices suggested safety culture issues since new apprentices reported feeling that they needed to "prove themselves", that they used trial and error to learn how to handle materials and that they didn't know how to work in teams for heavy tasks. Due to the very heavy nature of MMH in construction, a focus on individual behaviors through interventions like body mechanics training is insufficient to protect workers. This suggests the need for interventions that focus on the workplace as opposed to the workforce.

Debra Chaplan, M.S. Director of Special Programs, California Building and Construction Trades Council, described challenges and successes in implementing a tobacco prevention program for construction workers in California. The BUILT (Building Trades Unions Ignite Less Tobacco) educational program used focus groups to tailor messages to construction worker audiences. Outreach included messages about the various toxics in tobacco smoke (e.g. benzene, formaldehyde, hydrogen cyanide) thus integrating occupational health apprentice worker training on chemical exposures, used tobacco-free golf tournaments to utilize popular construction union events, provided information on the higher smoking rates among construction workers, and included messages on how smoking related medical costs affect premiums and ultimately monies available for pensions and wages. Program accomplishments include outreach to about 125 local unions, creation of an activist network, promotion of tobacco-free construction sites (construction sites are not considered indoors and are not covered by existing tobacco laws), and higher awareness of tobacco issues. Key informant interviews and focus groups are conducted on an on-going basis examining changing attitudes of leadership and groups of workers, but to date, there has been no overview survey of prevalence rates among the target population.

Angela Brennan, M.P.H., Associate Director Health Promotion, Laborers Health and Safety Fund, described the "Sun Sense" program for construction Laborers. The program was developed in recognition of the high skin cancer risks among outdoor construction workers and the relatively low usage of sunscreen among younger men. Other types of occupational risks to laborers such as exposure to coal tar pitch and creosote can add to these skin cancer risks. The program has used summertime "campaign" approaches including toolbox talk curricula, posters, and information inserts, along with free supplies to encourage use of sunscreen. Hand-out materials and messages have been tailored for the target audience. For example, sunscreen/insect repellent towelettes are provided (males are considered less "lotion-oriented") along with neck flaps that attach to the backs of hard hats, sunscreen lip balm, and materials describing skin damage/cancer hazards and skin self-examination. The program appears to be successful based on the popularity of the materials. No other formal evaluation has been done.

• Opportunities for an integrated approach

- -Outcomes for possible integrated approaches include: musculoskeletal disorders, stress-related disorders, overexertion injuries, smoking, and skin cancer.
- -Health insurance claims, combined with WC data, are an important source of information for integrated approaches. While workers compensation is supposed to be the primary vehicle for occupational injuries and illnesses, there was general agreement that many occupational injuries and disorders are often shifted into the health insurance claim system. We need to acknowledge that this is very difficult to do in a non-union environment and MANY construction workers do not have health insurance! [My opinion that is where the focus of health promotion in construction should be adequately insuring the working population!]

- -Computer software for sorting and screening insurance claims has promise as a mechanism for identifying both occupational and non-occupational outcomes deserving of interventions. Power can be increased by linkage to other types of records.
- -Joint labor-management trust funds have rapport and credibility with both employees and employers and present promising vehicles for integrated approaches.

• Barriers to success

- -Construction is difficult to study changing employers, changing tasks, small dispersed worksites and employers, and irregular employment.
- -Safety culture can be an issue "acceptance" of hazards varies and can blunt new initiatives
- -More information is needed on the effectiveness of integrated interventions.
- -Non-union construction workers are less likely to have health insurance benefits.
- -Work-relatedness is not obvious for many diseases and disorders.
- Due to the high risk associated with work in construction, care should be taken to avoid inappropriately shifting to a focus on individual behavior change and away from appropriate workplace controls as we seek to promote overall improvements in health.
 - Recommendations for overcoming identified barriers
- -Tailor interventions to specific construction trade audiences
- -Integrate health promotion with occupational safety and health messages and vice versa (I do not see how this follows really .. this was sort of a forgone conclusion beforehand I think. However, I am not sure we have addressed whether this is the best approach!)
- -Use multi-employer approaches such as joint insurance funds
- -Increase use of software tools for fund managers and technical assistance. (the software won't analyze alone)
- -Increase and improve software tools for identifying occupational and health promotion issues (e.g. develop standard distributions to allow comparisons) This is an issue broader than software.. we need to identify sources of data that can be used analytically to address these issues.
- -Fund intervention effectiveness research to evaluate integrated approaches.
- -Create best practices for integrated approaches to minimize unintended consequences.